

RLD Series

Features

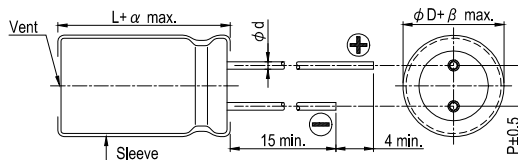
- 105°C, 10,000 ~ 12,000 hours assured
- 10 φ ~ 18 φ with large permissible ripple current
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS compliant



Specifications

Items	Performance																											
Category Temperature Range	160 ~ 400V	450 ~ 500V																										
	-40°C ~ +105°C	-25°C ~ +105°C																										
Capacitance Tolerance	± 20% (at 120 Hz, 20°C)																											
Leakage Current (at 20°C)	<table border="1"> <thead> <tr> <th>Time</th> <th colspan="2">after 5 minutes</th> </tr> </thead> <tbody> <tr> <td>Leakage Current</td> <td>CV ≤ 1,000 I = 0.03CV + 15(μA)</td> <td>CV > 1,000 I = 0.02CV + 25(μA)</td> </tr> </tbody> </table>		Time	after 5 minutes		Leakage Current	CV ≤ 1,000 I = 0.03CV + 15(μA)	CV > 1,000 I = 0.02CV + 25(μA)																				
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Where, C = rated capacitance in μF, V = rated DC working voltage in V																												
Tanδ (at 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> <th>500</th> </tr> </thead> <tbody> <tr> <td>Tanδ (max.)</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>								Rated Voltage	160	200	250	350	400	450	500	Tanδ (max.)	0.20	0.20	0.20	0.24	0.24	0.24	0.24				
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Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below.																											
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* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 10,000 ~ 12,000 hours at 105°C.																												
Shelf Life Test	<table border="1"> <thead> <tr> <th>Test Time</th> <th>1,000 Hrs</th> </tr> </thead> <tbody> <tr> <td>Capacitance Change</td> <td>Within ± 20% of initial value</td> </tr> <tr> <td>Tanδ</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Less than 500% of specified value</td> </tr> </tbody> </table>		Test Time	1,000 Hrs	Capacitance Change	Within ± 20% of initial value	Tanδ	Less than 200% of specified value	Leakage Current	Less than 500% of specified value																		
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Ripple Current and Frequency Multipliers	<table border="1"> <thead> <tr> <th>Frequency (Hz)</th> <th>120</th> <th>1k</th> <th>10k</th> <th>100k up</th> </tr> </thead> <tbody> <tr> <td>Cap. (μF)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>< 100</td> <td>1.00</td> <td>1.75</td> <td>2.25</td> <td>2.50</td> </tr> <tr> <td>≥ 100</td> <td>1.00</td> <td>1.67</td> <td>2.05</td> <td>2.25</td> </tr> </tbody> </table>				Frequency (Hz)	120	1k	10k	100k up	Cap. (μF)					< 100	1.00	1.75	2.25	2.50	≥ 100	1.00	1.67	2.05	2.25				
	Frequency (Hz)	120	1k	10k	100k up																							
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< 100	1.00	1.75	2.25	2.50																								
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Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

φ D	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φ d	0.6		0.8	
α	L < 20: 1.5, L ≧ 2.0			
β	0.5			

All product specifications in the catalog are subject to change without notice. (Cat. 2025E3)



Aluminum Electrolytic Capacitors

RLD

Dimension and Permissible Ripple Current Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 105°C

Rated Volt. (Voc) Contents Cap.(μ F)	160V (2C)			200V (2D)			250V (2E)			350V (2V)			400V (2G)		
	$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz
10													10x16	125	313
12													10x16	135	338
18													10x20	180	450
22							10x16	200	500				10x20	200	500
27				10x16	200	500							10x25	240	600
33							10x20	240	600				10x35	300	750
39	10x16	245	613												
47				10x20	290	725	10x25	315	788	12.5x30	450	1,125	10x50	400	1,000
56	10x20	315	788	10x25	345	863	12.5x25	460	1,150	10x50	440	1,100	12.5x35	540	1,350
68	10x25	375	938	10x35	425	1,063	10x35	430	1,075	12.5x35	525	1,313	16x25	515	1,288
82	10x30	445	1,113	12.5x25	565	1,413	12.5x25	510	1,275	12.5x40	595	1,488	18x25	580	1,450
100	10x35	520	1,170	10x45	565	1,271	12.5x30	590	1,475	16x25	565	1,413	12.5x45	620	1,550
120	10x40	595	1,339	12.5x30	660	1,485	10x45	515	1,288	12.5x45	675	1,688	16x35.5	685	1,713
150	10x50	715	1,609	12.5x35	765	1,721	12.5x30	590	1,475	16x31.5	670	1,675	18x35.5	790	1,778
180	12.5x25	680	1,700	10x50	640	1,440	10x50	585	1,316	16x35.5	755	1,699	16x40	870	1,958
220	12.5x35	850	1,913	12.5x40	880	1,980	12.5x35	700	1,575	18x31.5	840	1,890	18x40	880	1,980
270	16x25	920	2,070	16x25	840	1,890	12.5x45	920	2,070	18x40	985	2,216	18x45	1,000	2,250
330	16x31.5	1,100	2,475	16x31.5	995	2,239	16x25	865	1,946	18x45	1,090	2,453			
390	18x25	1,050	2,363	18x25	950	2,138	16x35.5	1,015	2,284	18x45	1,090	2,453			
470	16x35.5	1,240	2,790	16x35.5	1,125	2,531	16x40	1,160	2,610	18x50	1,220	2,745			
560	18x31.5	1,255	2,824	18x31.5	1,135	2,554	18x31.5	1,135	2,554						
	18x31.5	1,255	2,824	18x35.5	1,300	2,925	16x50	1,330	2,993						
	16x40	1,420	3,195	16x40	1,280	2,880	18x40	1,320	2,970						
	18x35.5	1,435	3,229	18x40	1,470	3,308	18x45	1,485	3,341						
	16x45	1,575	3,544	16x50	1,510	3,398									
	18x40	1,590	3,578	18x45	1,610	3,623	18x50	1,625	3,656						
	16x50	1,760	3,960												
	18x45	1,770	3,983												
	18x50	1,945	4,376												

Rated Volt. (Voc) Contents Cap.(μ F)	450V (2W)			500V (2H)		
	$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
		120 Hz	100k Hz		120 Hz	100k Hz
6.8	10x16	125	313			
12	10x20	150	375	12.5x20	135	338
15	10x25	185	463	12.5x25	165	413
22	10x35	250	625	12.5x35	220	550
27	10x40	290	725	12.5x40	260	650
33	12.5x25	340	850			
33	12.5x30	400	1,000	12.5x45	285	713
47	12.5x40	525	1,313			
47	16x25	500	1,250	16x31.5	360	900
56	12.5x50	605	1,513			
56	16x31.5	585	1,463	16x35.5	420	1,050
68	16x35.5	660	1,650	16x40	490	1,225
68	18x31.5	660	1,650			
82	16x45	760	1,900	18x35.5	540	1,350
82	18x35.5	755	1,888			
100	16x50	855	1,924			
100	18x40	845	1,901	18x45	660	1,485
120	18x45	945	2,126			

Part Numbering System

RLD Series 15 μ F $\pm 20\%$ 450V Bulk Package Flat Type 10 $\phi \times 25L$ Regional Tracking Purpose

RLD **150** **M** **2W** **BK** **F** **1025** **S**

Series Name | Capacitance | Capacitance Tolerance | Rated Voltage | Lead Configuration and Package | Rubber Type | Case Size

Note: For more details, please refer to "Part Numbering System - Radial Type" on page 139.

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